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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,398	03/25/2004	Katsuyuki Naitoh	4074-12	5563

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ARLINGTON, VA 22203

EXAMINER

ANYA, IGWE U

ART UNIT	PAPER NUMBER
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2891

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

31

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,398	<b>Applicant(s)</b> NAITOH, KATSUYUKI	
	<b>Examiner</b> Igwe U. Anya	<b>Art Unit</b> 2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-11 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 8-11 is/are allowed.  
 6) ☒ Claim(s) 3-5 and 7 is/are rejected.  
 7) ☐ Claim(s) 6 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/23/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 3 – 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugaya et al. (US Patent 6784530).

3. Sugaya et al teach a semiconductor device (figs. 2A – 2F) comprising:

a semiconductor chip (203); and

a flexible substrate connected to the semiconductor chip (fig. 2B) the flexible substrate (col. 8 lines 11 – 23) including:

an insulating film (207);

a plurality of internal connecting electrodes (202C, 205), provided on a surface of the insulating film, to be connected to the semiconductor chip;

a plurality of wires (202C), provided on the surface of the insulating film, for connecting the internal connecting electrodes and a plurality of external connecting electrodes (202B) to be connected to external devices;

a protective film (206) for coating the internal connecting electrodes, the wires and the surface of the insulating film, wherein the semiconductor chip is mounted by positioning an element surface so as to face a surface of the flexible substrate and connecting the element surface to the internal connecting electrodes of the flexible substrate (col. 8 lines 43 – 59); and

wherein a periphery of the semiconductor chip is sealed with synthetic resin (fig. 2E element 201A, & col. 9 lines 26 – 30).

4. Claims 3, 4 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Seko (USPAB 20040061240).

5. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

6. Seko teaches a semiconductor device (figs. 1A – 4D) comprising:

a semiconductor chip (3);

a flexible substrate (1) connected to the semiconductor chip (fig. 1E), the flexible substrate including an insulating film (paragraph 33);

a plurality of internal connecting electrodes (6, 2), provided on a surface of the insulating film, to be connected to the semiconductor chip;

a plurality of wires (2), provided on the surface of the insulating film, for connecting the internal connecting electrodes and a plurality of external connecting electrodes (paragraph 47) to be connected to external devices;

a protective film (7) for coating the internal connecting electrodes, the wires and the surface of the insulating film, wherein the semiconductor chip is mounted by positioning an element surface so as to face a surface of the flexible substrate and connecting the element surface to the internal connecting electrodes of the flexible substrate (1E); and

wherein the chip is an LCD driver chip (paragraphs 38, 53).

7. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 8 – 11 are allowable, because prior does not teach inter alia, a solder resist coating internal connecting electrode and wires of a semiconductor chip and the surface of an insulating film on which the electrodes/wires are formed.

### ***Response to Arguments***

9. Applicant's arguments filed March 13, 2006 have been fully considered but they are not persuasive. Sugaya et al. teach an insulating coating film (206) coating the internal connecting electrodes (205), the wires (202C) and the surface of the insulating film (207).

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

11. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Contact Information***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igwe U. Anya whose telephone number is (571) 272-1887. The examiner can normally be reached on M - F 8:30am - 5:00pm.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on (571) 272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Igwe U. Anya  
Examiner  
Art Unit 2891

IA

May 26, 2006

*C. Chaudhari*  
**Chandra Chaudhari**  
Primary Examiner